

REMARKS

Claims 1-29 are currently pending. No amendments to the claims have been made.

Section 102

Claims 20-22 and 24-29 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,764,475 to Bialke et al. ("Bialke"). This rejection is respectfully traversed.

Independent claim 20 is directed to a film prepared from an ionomeric urea/urethane polymer comprising (a) repeating units derived from an aliphatic polyester polyol, and (b) repeating units derived from a polyisocyanate. The polymer contains less than about 2 mole % of urea units described by the formula – R-N(R²)-C(O)-N(R²)-R¹, where R¹ is a C₁-C₂₀ aliphatic hydrocarbon radical. In order for R¹ to be a C₁-C₂₀ aliphatic hydrocarbon radical, either an aliphatic diamine such as ethylenediamine as a chain extender or an aliphatic polyisocyanate must be used. The present invention has achieved films which are suitable for use in gloves prepared from an ionomeric urea/urethane polymer without the use of a diamine chain extender.

Bialke is not directed to polyureaurethane films, but is instead directed to polymers and polymer blends which include step (1) a polymer in latex or dispersion form based on alkylene oxide and (2) one or more other polymer latexes or dispersions which may include polyurethane. Bialke refers to U.S. Patent No. 6,017,997 to Snow et al. ("Snow") for the disclosure of water-borne polyurethane, polyurea, and poly(urethane-urea) dispersions ("PUD"). Bialke then generically describes some components which may be included in PUDs. For example at column 8, lines 42-44, Bialke states, "Generally PUD comprises polymerized units of diisocyanate and hydrophilic moiety, together with diol, diamine, or both diol and diamine." Bialke does not disclose the preparation of a polyurethaneurea dispersion prepared without the addition of a diamine chain extender and does not disclose that water may be used as a chain extender.

The Examiner has relied on the generic teaching of "PUD" for allegedly showing that an ionomeric urea/urethane polymer is prepared without the use of a diamine chain extender as in the present claims. However, none of the elements of Claim 20 are present in this disclosure. Specifically, Bialke does not disclose an ionomeric urea/urethane polymer having the claimed urea concentration limitation.

The Examiner has stated that it is inherent that the urea concentration of claim 20 is inherent in Bialke. Applicants respectfully traverse. The urea concentration of the present claims is not inherent in Bialke. The only teaching of a diamine chain extender in Bialke is that PUDs generally include a diamine chain extender. This is in contrast to the present invention where a diamine chain extender must be intentionally excluded to achieve the claimed urea concentration.

In order for any reference to anticipate a claim, all elements of the claim must either be disclosed literally or inherently in the reference. The Examiner has asserted that Bialke discloses the films of Claim 20 because the urea concentration would have been inherent.

The standard for inherency is very clear “Inherency.. may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981). [citations omitted]. In other words, the element that is asserted to be inherent must necessarily and inevitably be present in the disclosure.

Based on the PUD disclosure included in Bialke, there is no disclosure or teaching of a polyurethaneurea prepared in the absence of a diamine chain extender. The only teaching is that diamine chain extenders are generally included in polyurethane dispersions. Furthermore, there is no disclosure that water may be used as the chain extender in preparation of an ionomeric urea/urethane composition. Since Bialke provides no disclosure of a PUD prepared in the absence of a diamine chain extender, Bialke only discloses aliphatic diamine chain extenders (column 9, lines 12-15), and Bialke fails to teach water as a chain extender, the urea concentration of Claim 20 are not inevitably present, and therefore are not inherent in Bialke.

Moreover, it is possible that one would look to the source of the PUD information disclosed in Bialke, for further teaching of the diamine chain extender. As stated above, the PUD disclosure is from Snow. In Snow, it is very clear that a chain extender is required. Specifically, Snow states at column 2, line 62 to column 3, line 3:

The polyurethane comprises the reaction product of (a) a polyisocyanate component; (b) an active hydrogen containing component, such as a polyol or a polyamide; and (c) a water-solubilizing compound having water-solubilizing groups to form an isocyanate terminal prepolymer, which is neutralized by reaction with a tertiary

amine, dispersed in water, and the reaction product is then *chain extended by reaction with a primary or secondary amine*. (emphasis added).

One following these teachings set forth in Snow, would include a diamine chain extender in a urea/urethane composition and would be outside the claimed urea concentration of Claim 20.

Since Bialke fails to disclose the claimed urea concentration, Bialke fails as a proper reference under Section 102. Reconsideration and withdrawal of the rejections of Claim 20 and Claims 21-22 and 24-29 which depend therefrom are respectfully requested.

Section 103

Claim 23 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Bialke. This rejection is respectfully traversed on the grounds that a *prima facie* case of obviousness has not been established.

The Examiner has stated that although the particular propionic acid included claim 23 is not disclosed by Bialke, it would have been obvious to substitute the propionic acid of the Bialke for the one in claim 23. However, the Examiner does not address any of the deficiencies of Bialke with respect to the lack of teaching of the urea concentration. Therefore, applicants respectfully submit that Bialke fails to teach every element of claim 23. As such, Bialke fails to establish a *prima facie* case of obviousness. Reconsideration and withdrawal of the rejection in view of Bialke are respectfully requested

Claims 1-19, 23, and 25 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Bialke in view of U.S. patent No. 5,008,325 to Soto et al. ("Soto") or U.S. Patent No. 3,404,131 to Taub ("Taub"). These rejections are respectfully traversed.

Soto and Taub are cited only for their inclusion of a copolymer of tetrahydrofuran and an alkylene oxide. However, Soto and Taub fail to overcome the deficiencies of Bialke as a proper anticipatory reference or establishing a *prima facie* case of obviousness for failing to disclose every element of the present claims.

Claims 1-19, 23, and 25 all have the common feature of including a polymer having a concentration described by the formula – R-N(R²)-C(O)-N(R²)-R¹, where R¹ is a C₁-C₂₀ aliphatic hydrocarbon radical of about 2 mole% or less. Bialke fails to disclose this element as set forth above. Neither Soto nor Taub provides any disclosure, teaching, or suggestion

of the urea concentration. Furthermore, the urea concentration would not be provided by either Soto or Taub considering that both references provide for chain extension using a diamine chain extender. As such both Soto and Taub are outside the urea concentration range as set forth in the claims

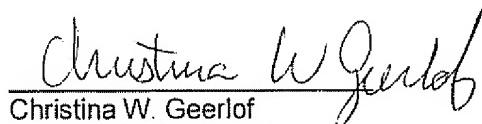
Since the combination of Bialke with either Soto or Taub fails to teach every element of the present claims, Applicants respectfully submit those reference fail to establish a *prima facie* case of obviousness with respect to claims 1-19, 23, and 25. Therefore, reconsideration and withdrawal of the rejections under Section 103 are appropriate and respectfully requested

CONCLUSION

For the reasons stated above, claims 1-29 are believed to be in condition for allowance. Accordingly, Applicants respectfully request that the Application be allowed. If prosecution may be further advanced, the Examiner is invited to telephone the undersigned to discuss this application.

Date: 5/24/07

Respectfully submitted,


Christina W. Geerlof
Attorney for Applicants
Registration No.: 45,690
Telephone: 302 683-3314
Facsimile: 302 683-3473